



North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT  
SOLID WASTE SECTION

**CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL**  
**Permit No. 4302-CDLF-1998**

HARNETT COUNTY  
is hereby issued a

**PERMIT TO CONSTRUCT AND OPERATE**  
DUNN-ERWIN CONSTRUCTION AND DEMOLITION DEBRIS (C&D) LANDFILL (AREA 1)  
A C&D LANDFILL UNIT ON TOP OF A CLOSED MSWLF (PHASE III)

AND

**POST-CLOSURE CARE REQUIREMENTS FOR CLOSED MSWLFS - PHASES I, II, & III**

Located on 449 Daniels Road, near the City of Dunn in G-rove Township, Harnett County, North Carolina, in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated thereunder and subject to the conditions set forth in this permit. The legal description of the site is identified on the deeds recorded for this property listed in Attachment 1, Part III of this permit.

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Edward F. Mussler, III, P.E.,  
Permitting Branch Supervisor  
Permitting Branch  
Solid Waste Section

## ATTACHMENT 1

### PART I: PERMITTING HISTORY

Permit Type	Date Issued	Doc ID No. (DIN)
MSWLF (Phases I through III)		
Order of Approval for Harnett County Sanitary Landfill (SR1725)	February 10, 1977	22158
Permit to Operate (PTO) – original issuance under Permit Number 43-02	November 15, 1988	22159
Letter of Closure – unlined MSWLF (Phase III)	January 09, 2002	22160
C&DLF (Area 1) on top of the MSWLF (Phase III) unlined and closed		
Permit to Operate – Permit Modification No. 3, Phase 1 (the first five year phase)	February 03, 1998	22161
Permit to Operate – Permit Modification No. 3, Phase 1 (the first five year phase, consisting of a two-acre area of C&DLF unit)	June 30, 1998	22162
PTO – Permit Modification No.4, Phase 1 (entire area)	March 03, 1999	22163
PTO – Permit Modification No.5, Phase 1	February 21, 2003	22164
PTO – Permit amendment in compliance with Rule .0547(4) & PTC for vertical expansion	<b>XXX, 2015</b>	<b>XXXX</b>

1. From 1977 to 1993, Harnett County (County) operated several unlined sanitary landfill units (Phases I & II) including municipal solid waste landfills (MSWLF) and construction and demolition debris landfill (C&DLF) cells – formerly known as demolition landfill cells, a tire monofill and an asbestos monofill in the southern portion of the existing landfill property (south of the tributary to Stewart Creek). The North Carolina (NC) Solid Waste Permit No. 4302-MSWLF-1988 was issued for the landfills in 1988 in accordance with NCGS 130A-294. The MSWLF – Phases I & II ceased receiving permitted wastes on or prior to October 9, 1993 and subsequently closed. MSWLF – Phases I & II were closed by installing a minimum of two-feet-thick soil cover, and the certified closure was completed in October 07, 1994. The in-place waste volume of the MSWLF – Phases I & II is not available.
2. Operations of the unlined MSWLF - Phase III in the northern portion of the existing landfill property were initiated in 1990. The MSWLF – Phase III ceased receiving permitted wastes on or prior to December 31, 1997 and subsequently closed by installing a minimum of 1.5-foot-thick clay-liner cap with an average permeability of  $4.3 \times 10^{-6}$  cm/sec. The unlined

MSWLF was certified for closure on December 31, 1998. The estimated in-place waste volume of the MSWLF – Phase III is approximately 1,071,000 cubic yards.

3. On December 29 1997, the County operated a Transfer Facility, under Permit No. 4307T-TRANSFER-1997 at this landfill property to receive and subsequently transfer and dispose of MSW at a permitted disposal facility.
4. In August 1997 the County submitted a permit application document to request the construction and operation of the Land Clearing and Inert Debris Landfill (LCIDLF) unit inside the landfill property. Additionally, the County submitted the final transition plan for the MSWLF included a permit modification request to construct and operate a Construction and Demolition Debris Landfill (C&DLF) – (now known as, NKA) Area 1 on top of the closed MSWLF – Phase III in 1998.
5. On February 03, 1998 the C&DLF - Area 1 on top of the closed MSWLF (Phase III) and LCIDLF – Phase 1 (NKA Fill Sequence 1) were approved to receive permitted wastes for disposal.
6. In June 2008, to comply with the North Carolina Solid Waste Management Rule 15A NCAC 13B .0547(4), the County requested an approval for continued operations of the C&DLF – Area 1.
7. In July 2013, the County requested for a permit modification to the June 2008 permit application of the C&DLF by changing waste fill plan at the south end of the landfill and increasing total gross capacity to 785,011 cubic yards, having a final fill elevation up to 318 feet above mean sea level (amsl) with a 4 (horizontal) to 1 (vertical) and/or 3 (horizontal) to 1 (vertical) side slopes.

## **PART II: LIST OF DOCUMENTS FOR THE APPROVED PLAN**

<b>DOCUMENT ID NO. (DIN)</b>	<b>DOCUMENT DESCRIPTION</b>
22244	<i>Transition Plan for Dunn/Erwin Landfill, Harnett County, North Carolina.</i> Prepared by McKim & Creed Engineers, P.A. Dated April 7, 1994 and approved January 22, 1996.
-	<i>Site and Construction Transition Plan modification application for the Harnett County (Dunn-Erwin) Landfill, Permit # 43-02.</i> Document titled Closure Plan Revision of Landfill Transition Plan Amendment for Construction and Demolition Landfill Operations, dated January 12 1998.

22201	Permit application drawings of Dunn/Erwin Landfill – LCID Landfill. Prepared by McKim & Creed Engineers, P.A. Dated August 06, 1997
-	Transition plan submittal document dated January 1998.
-	One acre C&D area plan dated January 12, 1998 and received 3 February 1998.
-	Closure documentation on one acre C&D disposal area, received 23 January 1998.
-	Closure certification and supplemental closure information dated 3 February 1998.
-	Additional one acre C&D area plan dated June 11, 1998; approved June 30, 1998.
-	Closure Report for Dunn-Erwin MSW Landfill Permit 43-02; Harnett County, NC. Dated December 1998 received 31 December 1998.
22202	As-built cap construction drawings. Prepared by McKim & Creed Engineers, P.A. and dated 12/31/98. The cap was for MSWLF- Phase III, and CDLF unit was proposed.
-	Letter dated 30 December 2002 requesting that permit 43-02 be extended.
290	Letter dated July 02, 2006, from CT Clayton, Sr., P.E., Inc. (CTC), to Ed Mussler requesting that C&D Cell be extended through April 1, 2008 and the final landfill grade increased to 306 feet.
6472	<i>Assessment of Corrective Measures, Harnett County Dunn/Erwin Landfill, Harnett County, N.C.</i> Prepared by CTC. Revised draft dated August 2007. Approved by SWS October 25, 2007 (DIN 3290).
5060	<i>Dunn Erwin Landfill, Harnett County, NC, C&amp;D Cell Permit Extension Request, Permit # 43-02.</i> Prepared by CTC. Dated June 26 2008. The following documents contained in the entire submittal are approved: zoning approval letter, resolution letter issued by County Board of Commissioners, and public notice documents.
8742	<i>Corrective Action Plan, Harnett County Dunn/Erwin Landfill, Harnett County, N.C.</i> Prepared by CTC. Dated December 2008, revised February 2009, second revised October 2009. Approved by SWS November 18, 2009 (DIN 8885).
9535	<i>Leachate Management and Operational Plan, Dunn/Erwin Landfill, Permit 43-02, Harnett County, North Carolina.</i> Prepared by CTC. Dated January 29, 2010
17303	<i>Dunn-Erwin Landfill, Corrective Action Projects: Project 1 – Sanitary Sewer Pump Station, Force Main, &amp; Groundwater Extraction System; Project 2 – Convenience Center and Transfer Station Improvements. Project Manual.</i> Prepared by CTC. Dated September 2012 and received September 25, 2012.
19805	Construction Site Visit Reports, Corrective Action Projects: Project 1 – Sanitary Sewer Pump Station, Force Main, & Groundwater Extraction System. Prepared

	by CTC. Dated March 15, 2013 through August 16, 2013.
19990	Construction Site Visit Reports, Corrective Action Projects: Project 1 – Sanitary Sewer Pump Station, Force Main, & Groundwater Extraction System. Prepared by CTC. Dated August 20, 2013 through October 07, 2013.
20089	<i>Revised Request for Corrective Action Evaluation, Dunn-Erwin Closed MSW Landfill, Harnett County, North Carolina.</i> Prepared by Smith Gardner, Inc. Dated November 08, 2013. Approved November 13, 2013 (DIN 20514).
20153	<i>Water Quality Monitoring Plan, Dunn/Erwin Landfill, Harnett County, N.C.</i> Prepared by Smith Gardner, Inc. Dated October 2013. Approved November 13, 2013 (DIN 20514).
20241 & 20628	<i>French Drain Removal Notification and Responses to Comments, Harnett County Dunn/Erwin CDLF (Permit No. 43-02).</i> Prepared by Smith Gardner, Inc. Dated December 02, 2013 and February 24, 2014.
<b>XXX</b>	Permit Amendment Applications for Continued Operation, Harnett County Dunn/Erwin CDLF (Permit No. 43-02). Prepared by Smith Gardner, Inc. Dated June 16, 2014 and revised through XXX, 2015. The application includes the revised Erosion and Sediment Control Plan for constructing South Berm.

### PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY

Harnett County, N.C. Register of Deeds		
Book	Pages	Acreage
2049	178-181 (Tract 1)	16.97
2049	178-181 (Tract 2)	46.75
2049	182-185	49.5
2049	186-189	49.5
2049	190-193	49.5
2431	935-938	50
2646	603-605	33.45
1091	456-458	26.97
1922	633-635	2.23
		Total acreage: 324.87

#### Notes:

1. The Harnett County - Dunn/Erwin C&DLF (Area 1) on top of the closed MSWLF (Phase III) is located inside the Harnett County Landfill Facility and has waste footprint of approximately 16.8 acres. The closed MSWLF (Phase III) has waste footprint of approximately 20.7 acres.

2. The Harnett County - Dunn/Erwin Transfer Station is located inside the Harnett County Landfill Facility and encompasses approximately 5 acres including the parking areas.
3. The Harnett County - Dunn/Erwin LCIDLF is located on the northwest side of the C&DLF – Area 1 inside the Harnett County Landfill Facility and encompasses approximately 9.8-acre waste footprint.

#### **PART IV: GENERAL PERMIT CONDITIONS**

1. This permit is issued by the North Carolina Department of Environment and Natural Resources, Division of Waste Management (the Division), Solid Waste Section (Section). In accordance with North Carolina Solid Waste Management Rule (Rule) 15A NCAC 13B .0201(d), a solid waste management facility permit shall have two parts: a Permit to Construct and a Permit to Operate. The Permit to Construct must be implemented in accordance with Attachment 2 of this permit. The Permit to Operate must be implemented in accordance with Attachment 3 of this permit.
2. The persons to whom this permit is issued (“permittee”) are the owners and operators of the solid waste management facility.
3. This permit shall not be effective until the certified copy of this permit which references legal descriptions for all land within the solid waste management facility boundary is recorded in the Register of Deeds office and indexed in the grantor index under the name of the owner of the land in the county or counties in which the land is located. The certified copy of the permit, affixed with the Register’s seal and the date, book, and page number of recording must be returned to the Section within 30 calendar days of issuance of this permit. If the Section does not receive the certified copy of the recorded permit within 30 calendar days of issuance of the permit, then and in that event, the permit is suspended and of no effect until the date the Section receives the certified copy of the recorded permit.
4. When this property is sold, leased, conveyed, or transferred in any manner, the deed or other instrument of transfer must contain in the description section, in no smaller type than that used in the body of the deed or instrument, a statement that the property has been used as a solid waste management facility and a reference by book and page to the recordation of the permit.
5. By beginning construction or receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.

6. Construction or operation of this solid waste management facility must be in accordance with Rule 15A NCAC 13B, Article 9 of the Chapter 130A of the North Carolina General Statutes (NCGS 130A-290, et seq.), the conditions contained in this permit; and the approved plan. Should the approved plan and the rules conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition. Failure to comply may result in compliance action or permit revocation.
7. This permit is issued based on the documents submitted in support of the application for permitting the facility including those identified in Attachment 1, "List of Documents for Approved Plan," and which constitute the approved plan for the facility. Where discrepancies exist, the most recent submittals and the Conditions of Permit shall govern.
8. This permit may be transferred only with the approval of the Section, through the issuance of a new or substantially amended permit in accordance with applicable statutes and rules. In accordance with NCGS 130A-295.2(g) the permittee shall notify the Section thirty (30) days prior to any significant change in the identity or business structure of either the owner or the operator, including but not limited to a proposed transfer of ownership of the facility or a change in the parent company of the owner or operator of the facility.
9. The permittee is responsible for obtaining all permits and approvals necessary for the development of this project including approval from appropriate agencies for sedimentation and erosion control and a General or Individual NPDES Stormwater Discharge Permit, if applicable. Issuance of this permit does not remove the permittee's responsibilities for compliance with any other local, state or federal rule, regulation or statute.

- End of Section -

## ATTACHMENT 2

### CONDITIONS OF PERMIT TO CONSTRUCT

#### PART I: FACILITY GENERAL CONDITIONS

1. Pursuant to the North Carolina Solid Waste Management Rules (Rules) 15A NCAC 13B .0201(d)(1), this permit approves the Facility Plan to allow the permittee construct the following landfill units and a training facility on top of the closed MSWLF within the landfill property according to the approved plan (**DIN XXX**) and the following permit conditions:
  - a. Vertical expansion of the C&DLF – Area 1 on top of the closed MSWLF – Phase III.
  - b. Vertical expansion (Fill Sequence 1) and lateral expansion (Fill Sequence 2) of the LCIDLF.
  - c. Harnett County Sheriff Department Training Facility including a fire range on top of the closed MSWLF – Phase I.
2. The permittee must maintain copies of this permit, the approved plans, and records in the operating record at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.
3. Pursuant to the Rules 15A NCAC 13B .0505(10), .0542(i)(2), & .0566(12), open burning solid waste is prohibited at this landfill facility.
4. Revisions to the approved design or construction of any landfill phases, cells, or fill sequences, or post-closure land uses require written approval of the Section in accordance with applicable statutes and rules. Revisions or changes that require modification to the permit will be subject to the appropriate permitting fee in accordance with the North Carolina General Statutes (NCGS) 130A-295.8.
5. All required sedimentation and erosion control measures must be installed and operable to mitigate excessive on-site erosion and to prevent silt from leaving the area of the landfill unit during the service life of the facility.
6. All earth disturbing activities must be conducted in accordance with the approved Erosion and Sediment Control Plan, the Sedimentation Pollution Control Act of 1973 (15 NCAC 4), and consistent with any other local, state or federal requirements.



7. Modifications to the approved sedimentation and erosion control activities must be approved by the NC Land Quality Section. Upon receiving the approval letter, the permittee shall notify the Section of any sedimentation and erosion control modifications.
8. Facility construction, operations or practices must not cause or result in a discharge of pollution, dredged material, and/or fill material into waters of the state in violation of the requirements under Sections 401 and 404 of the Clean Water Act, as amended.

**PART II: CONSTRUCTION CONDITIONS FOR C&DLF - AREA 1**

9. Pursuant to Rule 15A NCAC 13B .0201(c), this permit approves the modified fill plan/vertical expansion of the southern portion of the C&DLF – Area 1, which results in placing additional capacity of approximately 99,500 cubic yards (CY) without changing the waste disposal boundaries by constructing a containment berm (South Berm) along the southern end of the landfill as shown on Sheet No. 5/ Drawing No. S4 and Sheet No. 15/ Drawing No. EX2 (**DIN XXX**). This Permit to Construct shall expire **XXX, 201X**, eighteen (18) months from the issuance date, as per Rule 15A NCAC 13B .0534(b)(2)(H) if the proposed construction of South Berm is not commenced.
10. The permittee is permitted to construct the C&DLF – Area 1 containing a total gross capacity of approximately 785,011 CY within the approved waste footprint of approximately 16.8 acres, which is located on top of the 20.7-acre, closed, and unlined MSWLF (Phase III). Gross capacity is the measured volume from the bottom of C&D waste (the top of the cover system of the closed MSWLF) through the top of final cover of the C&DLF.
11. This facility shall conform to the specific conditions set forth in this permit and the provisions of Rule 15A NCAC 13B .0534(b)(2).
12. The permittee shall submit the Section an amendment to this permit for any subsequent phase of development of the C&DLF – Area 1 or a modification request to revise or modify the approved design or construction of any landfill phases, cells or fill sequences require in accordance with Rules 15A NCAC 13B .0533(a)(2) and (a)(4), respectively.
13. Prior to construction of South Berm, all sedimentation and erosion control activities shall be constructed and conformed to the requirements described in the approved Erosion and Sediment Control Plan (**DINXXX**), the Sedimentation Pollution Control Law (15A NCAC 04), and any required NPDES permits. During the course of construction of South Berm, the permittee must implement, but not limited to, the following sedimentation and erosion control activities:

- a. All sedimentation and erosion control activities shall be conducted by installing and maintaining adequate structures and measures to manage the run-on and run-off generated by the 24-hour, 25-year storm event, to prevent silt from leaving the site, and to prevent excessive on-site erosion.
  - b. Provisions for a vegetative ground cover sufficient to restrain erosion must be accomplished within 30 working days or 120 calendar days upon completion of any phase of C&DLF development.
14. The permittee shall conduct a preconstruction meeting, on site, prior to initiating construction of South Berm and periodic construction progress meetings, as needed. The permittee shall notify the Section 10 days prior to said meeting.
15. The permittee shall implement the approved construction quality assurance (CQA) plan and technical specifications including the subsurface investigation and soil/geotechnical testing, testing data review, and/or modification of engineering design including slope stability analysis as warranted in accordance with Rule 15A NCAC 13B. 0541 and the approved CQA Manual and Technical Specifications (**DINXXX**) during the course of constructing South Berm.
16. Prior to receiving waste at this expanded area of the C&DLF which is contained by the new constructed South Berm, a Permit to Operate must be obtained from the Section in accordance with Rules 15A NCAC 13B .0201(b) &(d)(2).

#### PRE-OPERATIONAL CONDITIONS

17. The following requirements shall be met prior to operating the expanded area of the C&DLF:
- a. Site preparation and the new constructed South Berm (grading, placement, compaction of fill and vegetation) have occurred in accordance with the approved plans.
  - b. A written CQA report including as-built drawings in accordance with Rule 15A NCAC 13B.0541(c) & (d) and the approved CQA Manual (**DIN XXX**) shall be submitted to the Section for review.
  - c. The permittee shall arrange for a site inspection by a representative of the Section for the purpose of demonstrating that the facility construction is consistent with approved plans and specifications.

- d. Prior to waste disposal in any new unit or cell, the permittee shall contact the appropriate regional Solid Waste Management Specialist to determine whether the Section chooses to hold a pre-operative meeting with key landfill personnel and representatives of the Section.
- e. Ground water monitoring wells and gas probes shall be installed, and surface water sampling locations shall be established. A baseline sampling event for background water quality shall be completely performed in accordance with 15A NCAC 13B. 0544(b)(1)(D). Well construction records and sampling results shall be submitted to the Section Hydrogeologist for review and approval prior to issuing the Permit to Operate.
- f. The permittee shall completely implement and install site access, security, signs, and safety requirements in accordance with 15A NCAC 13B. 0542(j).
- g. The permittee shall completely construct and install all required and approved measures, devices, and structures to prevent soil erosion, control sedimentation, manage surface water drainage, and to protect surface water body in accordance with 15A NCAC 13B. 0542(k) & (l).

**PART III: CONSTRUCTION CONDITIONS FOR THE LAND CLEARING AND INERT DEBRIS LANDFILL (LCIDLF) – FILL SEQUENCES 1 & 2**

- 18. Pursuant to Rules 15A NCAC 13B .0201(c) and (e), this permit approves the facility and waste fill sequence plan of the LCIDLF as shown on Sheet No. 8/ Drawing No. S7 and Sheet No. 16/ Drawing No. EX3 of the approved plan (**DIN XXX**).
- 19. This permit approves the permittee to construct the LCIDLF containing a total gross capacity of approximately 321,529 CY within the permitted waste footprints of approximately 9.8 acres. Gross capacity that is the measured volume between the bottom of waste and the top of final cover.
  - a. Fill Sequence 1: vertical expansion over the existing waste footprint of 7.4 acres with an additional waste gross capacity of approximate 116,909 CY, and
  - b. Fill Sequence 2: lateral expansion over the proposed waste footprint of 2.4 acres with a waste gross capacity of approximate 35,743 CY.

**PRE-OPERATIONAL CONDITIONS**

- 20. The permittee must complete the following permit conditions prior to receiving solid waste in a new landfill cell:

- a. A sign must be posted at the entrance as required by the Rule 15A NCAC 13B .0566(16).
- b. The disposal unit boundary must be accurately identified with permanent markers.
- c. Completion of constructing and installing all required and approved measures, devices, and structures to prevent soil erosion, control sedimentation, manage surface water drainage, and to protect surface water-body in accordance with the approved Erosion and Sediment Control Plan and the Permit Conditions Nos. 5 through 8.
- d. A site inspection and pre-operative meeting must be conducted by a representative of the Section. The permittee must notify the Section's Senior Environmental Specialist and makes arrangements for the site inspection and pre-operative meeting.
- e. After completion of the requirements in subparagraphs a. through d. above, the Section Senior Environmental Specialist will notify the Permitting Branch Supervisor by letter or email that the pre-operative requirements have been met and that the unit(s) may commence receiving waste. The permittee will be copied on the notification and may begin receiving waste at that time.

**PART IV: CONSTRUCTION CONDITIONS FOR THE TRAINING FACILITY ON TOP OF CLOSED MSWLF – PHASE I**

- 21. The permittee is permitted to construct the Harnett County Sheriff Department Training Facility on top of the closed MSWLF – Phase I as shown on Figure No. E1 and Sheet No. 2/ Drawing No. S1 of the approved plan (**DIN XXX**). The training facility includes:
  - a. A K-9 training area.
  - b. A fire range area [three (3) ranges separated by soil berm)].
  - c. A class room and training related structures, tower, and storage units.
- 22. This facility shall conform to the specific conditions set forth in this permit and the provisions of Rule 15A NCAC 13B .1604(b)(2).
- 23. The permittee must construct the training facility in compliance with permit conditions, the approved plan, and any local, state or federal regulation, rule, law related to constructing a fire range and training facility.

24. The permittee must, in compliance with the requirements stated in Rule 15A NCAC 13B .1629(c)(3), construct the training facility without disturbing, impairing, or damage the integrity of the final cover system of the landfill or any other components of the containment system, or the function of the monitoring system by achieving the following minimum requirements:
  - a. The permittee must notify the Section of any damage of the final cover system or monitoring system in a timely manner and restore the damaged system to the original and functional conditions approved by the Section.
  - b. During the construction of the training facility including the fire range and related structures, the permittee must keep the excavation of the existing final cover system of the landfill to a minimum as practicable and restore the disturbed area of the cover system with proper earthen backfill, followed by re-grading for drain, to the minimum of 24-inches thickness, which must be confirmed by approved testing or survey methods.
25. The above-ground structures including training classrooms and storage units must be constructed on a foundation with a suitable vapor barrier to prevent from landfill gas intrusion according to the approved plan (**DIN XXX**).
26. The permittee must install the proper warning signs and security/access control measures according to the approved plan (**DIN XXX**) and any applicable local, state or federal regulation, rule, and law.
27. The permittee must submit the Section a copy of the construction record report including as-built drawings and other permits – certificate of occupancy related to the construction activities for conducting a review and approval prior to utilize the training facility.

- End of Section -

## ATTACHMENT 3

### CONDITIONS OF PERMIT TO OPERATE

#### PART I: FACILITY OPERATING CONDITIONS

1. Pursuant to Rules 15A NCAC 13B .0201(g) & .0563(4), the Permit to Operate for Harnett County Dunn-Erwin Landfill Facility including C&DLF (Area 1) on top of the closed MSWLF (Phase III), LCIDLF (Fill Sequences 1), and other miscellaneous waste management units shall expire **XXX**.
2. This permit approves the continued operation of the C&DLF – Area 1 on top of the closed MSWLF (Phase III), LCIDLF (Fill Sequences 1), the new facility plan, the other miscellaneous solid waste management units, and the onsite environmental management protection facilities as described in the approved plans (**DIN XXX**). Operations of any future phases, cells, or fill sequences of the C&DLF or LCIDLF require written approval of the Section and must be constructed in accordance with applicable statutes and rules in effect at the time of review.
3. The permittee must properly maintain permanent markers that accurately identify the edge of the approved waste disposal boundaries of C&DLF (Area 1) and LCIDLF (Fill Sequences 1). Additionally, the waste boundaries of the closed MSWLF (Phase III) underneath the C&DLF (Area 1) must be properly marked.
4. The facility is approved to receive permitted waste including permitted recyclable material which shall be generated inside **Harnett County** and is permitted to receive solid waste for disposal at the maximum annual rate of 35,000 tons consistent with the Resolution approved by Harnett County Board of Commissioners on June 16, 2008 (DIN 5060). Revisions to the design or operation of the facility or changes to the facility service area must be submitted to the Section for review and approval prior to the implementation of any changes according to NCGS 130A-294 (b1) & -295.8. Revisions or changes that require modification to the permit will be subject to the appropriate permitting fee according to NCGS 130A-295.8.
5. Pursuant to Rules 15A NCAC 13B .0542 & .0566 and the approved Operations Manual (**DIN XXX**), the permittee must comply with the following permit conditions to operate the landfill disposal units:
  - a. Signs and site access controls must be installed and operational, and access roads must be of all-weather construction and properly maintained.

- b. Well-trained attendant must be on duty at all times while the landfills are open for public use to assure compliance with operational requirements and to prevent acceptance of unauthorized wastes. Waste screening program must be routinely conducted and enforced.
  - c. Open burning of land clearing waste is prohibited. If a fire occurs, the permittee must provide verbal notification to the Section within 24 hours of the occurrence followed by a written report of the details of the fire within 10 working days of the occurrence.
  - d. Leachate and observed leachate seeps must be properly managed on site using best management practices to prevent leachate seepage from leaving the limits of waste disposal areas and to minimize the potential for reoccurrence.
  - e. Routine inspections for leachate seeps/breakouts at side slopes of landfill units and implementation of the measures to prevent leachate break outs must be properly conducted. In the event of any leachate break out is observed, the permittee must notify the Section and implement the corrective actions including environmental media sampling described in the approved plans (**DIN XXX**).
  - f. Solid waste shall not be disposed of in water, and surface water (run-on) shall be diverted from the working face and shall not be impounded over waste.
  - g. Solid wastes shall be restricted to the smallest area feasible and compacted as densely as practical into cells by proper construction equipment.
6. The permittee must maintain copies of this permit, the approved plans, and records in the operating record at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.
7. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act NCGS 113A-50, et seq., and rules promulgated under 15A NCAC 4. All required sedimentation and erosion control measures must be installed and operable to mitigate excessive on-site erosion and to prevent silt from leaving the area of the landfill unit during the service life of the facility.
8. Facility construction, operations or practices must not cause or result in a discharge of pollution, dredged material, and/or fill material into waters of the state in violation of the requirements under Sections 401 and 404 of the Clean Water Act, as amended.

9. Modifications to the approved sedimentation and erosion control activities require approval by the North Carolina Land Quality Section. The Section must be notified of any sedimentation and erosion control plan modifications.
10. Modifications to the approved sedimentation and erosion control activities require approval by the North Carolina Land Quality Section. The Section must be notified of any sedimentation and erosion control plan modifications.

**PART II: OPERATION CONDITIONS FOR C&DLF – AREA 1 (ON TOP OF CLOSED MSWLF – PHASE III)**

11. Pursuant to Rule 15A NCAC 13B .0533(a)(2), no later than **Date XXX**, the permittee must submit to the Section:
  - a. A permit amendment application prepared in accordance with Rule 15A NCAC 13B .0535 (b), and
  - b. A Corrective Action Evaluation Report to demonstrate the effectiveness of the implemented corrective action program in accordance with Rule 15A NCAC 13B .0547(4)(c) and the approved Corrective Action Plan (CAP, DIN 8742) and its amendment (DIN 20089).
12. The following table lists the dimensions and details for the C&DLF – Area 1 on top of the closed MSWLF (Phase III). Total gross capacity for the C&DLF unit is 785,011 cubic yards (CY) and defined as the volume measured from the bottom of C&D waste (the top of the cover system of the closed MSWLF) through the top of final cover of the C&DLF having a final fill elevation up to 318 feet amsl with a 4 (horizontal) to 1 (vertical) and/or 3 (horizontal) to 1 (vertical) side slopes as shown on Sheet No. 4/ Drawing No. S3 and Sheet No. 12/ Drawing No. EX1. The estimated service life of the facility is through 2018, as stated in the approved Facility Plan (**DIN XXX**).

C&DLF Unit	Acres	Gross Capacity (cubic yards)	Estimate Service Life
Area 1 (Filled, as of July 16, 2013)	16.8	571,963	-
Area 1 remaining capacity upon completion of the vertical expansion at the south end	-	213,048	4.8
Total	16.8	785,011	

Note:

1. The life expectancy of the C&DLF is based on an assumed average disposal rate of 15,000 tons/year and is projected from July 16, 2013.



13. This facility is permitted to receive the following wastes for disposal in the C&DLF:
  - a. "C&D solid waste" as defined in Rule 15A NCAC 13B .0532(8) means solid waste generated solely from the construction, remodeling, repair, or demolition operations on pavement and buildings or structures. C&D waste does not include municipal and industrial wastes that may be generated by the on-going operations at buildings or structures.
  - b. "Inert debris" as defined in NCGS 130A-290 (a)(14) means solid waste that consists solely of material such as concrete, brick, concrete block, uncontaminated soil, rock, and gravel.
  - c. "Land-clearing debris" as defined in NCGS 130A-290 (a)(15) means solid waste that is generated solely from land-clearing activities, limited to stumps, trees, limbs, brush, grass, and other vegetative material.
  - d. "Asphalt" in accordance with NCGS 130A-294(m).
  - e. Solid waste that is generated by mobile or modular home manufacturers and asphalt shingle manufacturers in Harnett County. The waste must be source separated at the manufacturing site and must exclude municipal solid waste, hazardous wastes, and other wastes prohibited from disposal at this landfill. It must be transported to the landfill in a shipment or container that consists solely of the separated waste to be disposed.
14. Regulated asbestos containing material as defined in 40 CFR 61 must be managed in accordance with 40 CFR 61. Disposal of asbestos waste to the C&DLF or the on-site asbestos monofill must be in accordance with Rule 15A NCAC 13B .0542(c)(2) and the approved Operations Manual (**DIN XXX**).
15. Wastewater treatment sludge is not approved for disposal. Wastewater treatment sludge may be accepted, with the approval of the Section, for utilization as a soil conditioner and incorporated into or applied onto the vegetative growth layer. The wastewater treatment sludge must not be applied at greater than agronomic rates nor to a depth greater than six inches.
16. Those wastes listed in Rule 15A NCAC 13B .0542 (e) must not be accepted for disposal, including, but not limited to, hazardous waste, municipal solid waste, liquid waste, commercial or industrial wastes, and yard trash.

17. Wooden pallets as defined in NCGS 130A-290(44a) are not approved for disposal except for those pallets generated in C&D activities and may be accepted and managed in the Yard Waste Storage and Processing Area according to the approved plan (**DIN XXX**) and the Permit Conditions in Part V of this permit.
18. "Yard waste" as defined in Rule 15A NCAC 13B .0101(56) meaning "Yard Trash" and "Land-Clearing Debris" as defined in NCGS 130A-290, including stumps, limbs, leaves, grass, and untreated wood are accepted and managed in the Yard Waste Storage and Processing Area or/and are disposed at the LCIDLF according to the approved plan (**DIN XXX**) and the Permit Conditions in Parts IV & V of this permit.
19. The facility is approved to receive permitted waste at an annual rate up to 15,000 tons. Maximum variance shall be in accordance with NCGS 130A-294(b1)(1).
20. The permittee must not knowingly dispose of C&D waste that is generated within the boundaries of a unit of local government that by ordinance:
  - a. Prohibits generators or collectors of C&D waste from disposing of that type or form of C&D waste.
  - b. Requires generators or collectors of C&D waste to recycle that type or form of C&D waste.
21. The facility operator must complete an approved operator training course in compliance with NCGS 130A-309.25.
  - a. A responsible individual certified in landfill operations must be on-site during all operating hours of the facility at all times while open for public use to ensure compliance with operational requirements.
  - b. All pertinent landfill-operating personnel must receive training and supervision necessary to properly operate the C&D landfill unit in accordance with NCGS 130A-309.25 and addressed by memorandum dated November 29, 2000.
22. The permittee must actively employ a training and screening program at the facility prepared in accordance with Rule 15A NCAC 13B .0544(e) for detecting and preventing the disposal of excluded or unauthorized wastes. At a minimum, the program must include:
  - a. Random inspections of incoming loads or other comparable procedures;
  - b. Records of any inspections;

- c. Training of personnel to recognize industrial, hazardous, liquid, municipal and other excluded waste types; and
  - d. Development of a contingency plan to properly manage any identified industrial, hazardous, liquid, municipal, or other excluded waste. The plan must address identification, removal, storage, and final disposition of these wastes.
23. In accordance with NCGS 130A-295.6 this landfill may use alternative daily cover (ADC) that has been previously approved at another sanitary landfill in North Carolina. The Section maintains a list of approved ADC and its appropriate use, which may be referred to, but is not required to be, in determining ADC types and uses.
24. The use of alternative periodic cover that does not meet the requirements stated in Permit **Condition No. 23** requires approval, prior to implementation, by the Section. Requests for alternative periodic cover approval must include a plan detailing the comprehensive use and a demonstration of the effectiveness of the alternative cover, developed according to Section guidelines. Plans that are approved by the Section will be incorporated into, and made a part of, the approved documents listed in Attachment 1.
25. Financial assurance must be continuously maintained for the duration of the facility in accordance with Rules 15A NCAC 13B .0547 (4)(e), 15A NCAC 13B .1628, and NCGS130A-295.2(h). During the active life of the C&DLF, the owner and operator must annually adjust the cost estimates including closure and post-closure activities for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s).

#### MONITORING AND REPORTING REQUIREMENTS

26. Groundwater and surface water monitoring must be conducted in compliance with Rules 15A NCAC 13B .1630 through .1637, and .0602, and the approved monitoring plan (DIN 20153). Any proposed modification to an approved plan must be submitted to the Section and approved prior to implementation.
27. Groundwater quality is subject to 15A NCAC 2L – Groundwater Classifications Standards and the Groundwater Protection Standards (GPS) established under Rule 15A NCAC 13B .1634(i). Surface water is subject to 15A NCAC 2B – Surface Water and Wetlands Standards.
28. A total of sixteen (16) ground water wells [MW-1, MW-2 (background well), MW-4, MW-9, MW-10, MW-16, MW-32 through and MW-35, MW-53, MW-56, MW-57, PZ-41S, GP-23W, and GP-30W] and four (4) surface water locations (SW-1 through SW-4)

comprise the approved water quality monitoring network for the entire landfill facility, unless otherwise specified by the Section.

- a. The permittee must obtain approval from the Section for the design, installation, and abandonment of any monitoring well or corrective action program well.
- b. A licensed geologist must be present to supervise the installation of groundwater monitoring wells and corrective action program wells.
- c. Each groundwater monitoring well and corrective action program well must be surveyed in accordance with Rule 15A NCAC 13B .1632 (d)(1).
- d. Each groundwater monitoring well and corrective action program well must have an identification plate permanently attached to the well, in accordance with 15A NCAC 2C .0108(o).
- e. Hydraulic conductivity and effective porosity values must be established for each screened interval in order to develop groundwater flow characteristics.
- f. Within thirty (30) days of completed construction of each new groundwater monitoring well and corrective action program well, the well construction record (GW-1b form), well schematic, boring log, field log and notes, and description of well development activities must be submitted to the Section. The submittal must also include a scaled topographic map, showing the location and identification of new, existing, and abandoned wells and piezometers, and hydraulic conductivity and effective porosity values, as described in subparagraphs c and e of this Permit Condition.
- g. Within thirty (30) days of the abandonment of a groundwater monitoring well or corrective action program well, the well abandonment record (GW-30 form) and any additional information included in the abandonment record must be submitted to the Section, consistent with 15A NCAC 2C .0114(b), and must be certified by a Licensed Geologist.
- h. Documentation of well completion, development details, repair, abandonment, and all other pertinent activities associated with each monitoring well and corrective action program well must be maintained in the facility operating record.
- i. A readily accessible, unobstructed path must be maintained so that monitoring wells, corrective action program wells, and surface water sampling locations are accessible using four-wheel drive vehicles.

29. The permittee must sample groundwater monitoring wells and surface water locations at the frequency - semi-annually according to the monitoring plan (DIN20513) unless otherwise specified by the Section. Groundwater and surface water samples must be analyzed for constituents including Appendix I constituents (per 15A NCAC 13B .1633), metals including mercury, Tetrahydrofuran (THF), and field parameters - pH, temperature, conductivity, and turbidity according to the approved monitoring plan (DIN 20513). Sampling frequency and sampling constituents may be subject to change according to requirements of the applicable corrective action program.
30. Monitoring reports of the analytical results for surface water and groundwater monitoring sampling events and groundwater corrective action program must be submitted to the Section within 120 days of the sample collection date. Analytical laboratory data must be submitted in electronic portable document format (pdf) and in a spreadsheet format in an Electronic Data Deliverable (EDD) Template. All monitoring reports must contain:
  - a. a potentiometric surface map for the current sampling event,
  - b. analytical laboratory reports and summary tables,
  - c. a completed Solid Waste Environment Monitoring Data Form, and
  - d. laboratory data submitted in accordance with the EDD Template.
31. All groundwater, surface water, corrective action program, and methane gas monitoring forms, reports, maps, plans, data, and correspondence submitted to the Section must include an electronic (pdf) copy.
32. The permittee must maintain a record of all monitoring events and analytical data in the operating record.
33. After completion of the post-closure monitoring period, in accordance with Rule 15A NCAC 13B .1627, and completion of the corrective action program, the Section will determine if further monitoring and post-closure maintenance will be required.

#### GROUNDWATER CORRECTIVE ACTION PROGRAM SPECIFIC CONDITIONS

34. Pursuant to Rule 15A NCAC 13B .1637, the permittee must implement a corrective action program to remediate elevated constituents in groundwater in accordance with the approved Corrective Action Plan (CAP, DIN 8742) and its amendment (DINs 20089, & 20153). The approved corrective action program consists of a groundwater extraction trench in conjunction with a leachate management system for the source control and

Phytoremediation coupling with Monitored Natural Attenuation (MNA) for treating down-gradient impacted groundwater. Any proposed modifications to the approved CAP must be submitted to the Section and approved prior to implementation.

35. The monitoring network for the corrective action program consists four (4) ground water wells [MW-2 (background well), MW-9, MW-10 and GP-30W], unless otherwise specified by the Section. Sampling frequency and constituents to be analyzed must be conducted in accordance with Table 3 of the approved monitoring plan (DIN 21933).
36. The permittee must properly operate and maintain the existing leachate collection system and leachate management system according to the approved plans (DINs 9535 and **XXX**).
  - a. Removal, reconfiguration, or modification of the components of the inactive portions of the leachate collection system must be implemented according to the approved plans (DINs 20241 & 20628).
  - b. The sumps of the existing leachate collection system must be accessible and operational until such time that leachate generated from the closed landfill curtains such that leachate levels within the sumps don't require periodic draw down.
  - c. The leachate pump station, leachate sumps, pumps, and storage tanks must be inspected at least once per week, properly and timely maintained and repaired.
  - d. Records of leachate pumped from the pump station for, alternatively, records of leachate hauled from the site when pump station is not operational will be placed in the operating record.
37. In the event that a leachate release or break out of the side slopes of a landfill, the permittee must take the following actions:
  - a. Take immediate measures to control, contain, and recover the discharged leachate according to the approved plan (**DIN XXX**);
  - b. Verbally notify the Section and the Regional Environmental Specialist of the occurrence as soon as practicable; and
  - c. Within thirty (30) days following any such leachate release occurrence, a written document describing, in a minimum, the event of leachate release, approximate amount of leachate released, impacted extents, actions carried out to remove the discharged leachate, a strategy for preventing future occurrence.

38. The permittee must provide a Corrective Action Evaluation Report to describe of the performance and effectiveness of the implemented corrective action program, including a technical evaluation of MNA as a remedy at the facility. The report must be submitted in accordance with Permit Condition No. 1, Attachment 3, Part I.
39. After the MNA baseline has been established, an EPA approved MNA screening model is required at least annually to simulate the groundwater remediation at the facility and determine the mass flux and mass balance. The model must be submitted annually with a monitoring report.
40. If the objectives of the corrective action program are not being met, as specified in the approved CAP and its amendment, rules, or as determined by the Section, the permittee must immediately implement the Contingency Plan in the approved CAP.
41. If constituents in groundwater migrate beyond the landfill property boundary, or it is suspected to have occurred based on sampling results near the property boundary, the permittee must immediately notify all persons in writing who own land or reside on land that directly overlies any part of the contaminant plume with details of the migration. The permittee must mitigate further releases to the groundwater, reduce threats to human health and the environment, and immediately implement the Contingency Plan in the approved CAP and its amendment.
42. If the corrective action program is modified to include an active groundwater treatment system:
  - a. The permittee must operate the groundwater treatment system in a manner that will prevent spills, releases or other adverse effects to human health and the environment.
  - b. The permittee must maintain an inspection schedule for the inspection of all parts of the groundwater treatment system as outlined in the approved CAP and its amendment.
  - c. The permittee must train all personnel operating the groundwater treatment system as outlined in the approved CAP and its amendment.
  - d. The permittee must sample the groundwater in the impacted aquifer, the groundwater as it enters and exits the groundwater treatment system and measure the volume and rate of flow of groundwater through the groundwater treatment system as indicated in the approved CAP and its amendment. The data must be submitted to the Section with a monitoring report.

43. Institutional controls (deed recordation, land and groundwater use restrictions) must be implemented as part of a groundwater treatment system pursuant to NCGS 143B-279.9 and 143B-279.10. The land and groundwater use restrictions will be imposed on the permitted facility and any buffer property that has been acquired to reduce or eliminate the danger to public health or the environment posed by the presence of contamination on the property. The permittee must submit to the Section, within 180 days of notified to do so, a survey plat, in accordance with the requirements of NCGS 143B-279.10, and as directed by the Section.
44. The permittee must continue to operate the corrective action program until the 15A NCAC 2L Groundwater standards and the GPS have been met at all points within the plume of contamination that lie beyond the relevant point of compliance for three (3) consecutive year, in accordance with Rule 15A NCAC 13B .1637.

#### LANDFILL GAS MONITORING REQUIREMENTS

45. Landfill gas monitoring must be conducted at the facility in accordance with the approved landfill gas monitoring plan (**DIN XXX**) and Rule 15A NCAC 13B. 1626 (4). The permittee must sample landfill gas quarterly unless otherwise required for corrective action or specified by the Section.
46. A total of four (4) landfill gas monitoring wells (GM-2, GM-4, GM-6, and GM-8) comprise the approved monitoring network for the active C&D unit (Area 1) and closed MSWLF - Phase III, unless otherwise approved or specified by the Section.
  - a. The permittee must obtain approval from the Section for the design, installation, and abandonment of any landfill gas monitoring probe or well.
  - b. A licensed geologist must be present to supervise the installation of landfill gas monitoring probes or wells. The exact locations, screened intervals, and nesting of the probes or wells must be established after consultation with the Section hydrogeologist prior to probe installation.
  - c. Each landfill gas monitoring probe or well must be surveyed for location and elevation by a North Carolina Registered Land Surveyor.
  - d. Each landfill gas monitoring probe or well must have an identification plate permanently attached to the well, in accordance with 15A NCAC 2C .0108 (o).
  - e. Within thirty (30) days of the completed construction of each new landfill gas monitoring probe or well, a schematic of the probe or well, to include boring log,



depth, and screened interval, must be submitted to the Section. The submittal must also include a scaled topographic map, showing the location and identification of new, existing, and abandoned landfill gas monitoring probes and wells.

- f. Within thirty (30) days of the abandonment of a landfill gas monitoring probe or well, an abandonment record must be submitted to the Section. The boring must be abandoned in accordance with 15A NCAC 2C .0113(d) and be certified by a Licensed Geologist.
  - g. All records of landfill gas monitoring probe or well installation, repair, abandonment, and all other pertinent activities associated with each landfill gas monitoring probe or well must be placed in the operating record.
  - h. A readily accessible, unobstructed path must be maintained so that landfill gas monitoring probes or wells are accessible using four-wheel drive vehicles.
47. All landfill gas monitoring must be conducted by properly trained personnel. Methane monitoring must include interior monitoring of onsite buildings.
48. Landfill gas monitoring reports must be added to the facility's operating record within 7 days of the monitoring event, and must include a description of the monitoring method used, the sampling results of each well and onsite buildings in percent of the lower explosive limit (LEL), date of monitoring, weather conditions, calibration report, and signature of the sampling personnel.
49. The permittee must maintain records of all landfill gas monitoring events in the operating record in accordance with Rule 15A NCAC 13B .0542 (n).
50. If landfill gas monitoring reveals detections of methane of at least 25 percent of the LEL in onsite buildings, or detections of LEL at the compliance boundary, the permittee must comply with the requirements of Rule 15A NCAC 13B .1626 (4).

#### REPORTING REQUIREMENTS

51. Copies of this permit, the approved plans, and all records required to be maintained in the operating record by the permittee must be maintained at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.

52. The permittee must maintain records of the following. Scales must be used to weigh the amount of waste received. The daily records are to be summarized into a monthly report for use in the required annual reports.
- a. The amount of all accepted solid waste materials as (i) C&D wastes, (ii) alternative cover material used as alternate periodic cover, and (iii) recyclable material.
  - b. Daily records of waste received and origins of the loads.
53. On or before August 1 annually, the permittee must submit an annual facility report to the Section, on forms prescribed by the Section.
- a. The reporting period shall be for the previous year beginning July 1 and ending June 30.
  - b. The annual report must list the amount of waste received and landfilled in tons and be compiled:
    - i. On a monthly basis.
    - ii. By county, city or transfer station of origin.
    - iii. By specific waste type.
    - iv. By disposal location within the facility.
    - v. By diversion to alternative management facilities.
  - c. A measurement of volume utilized in the C&D cells must be performed during the second quarter of the calendar year. The date and volumes, in cubic yards, must be included in the report.
  - d. The amount of C&D waste, in tons from scale records, disposed in landfill cells since February 03, 1998, through the date of the annual volume survey must be included in the report.
  - e. The tons of C&D waste recycled, recovered or diverted from disposal including a description of how and where the material was ultimately managed, as applicable, must be included in the report.
  - f. The completed report must be forwarded to the Regional Environmental Specialist for the facility by the date due on the prescribed annual facility report form.
  - g. A copy of the completed report must be forwarded to each county manager for each county from which waste was received at the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the

Regional Environmental Specialist by the date due on the prescribed annual facility report form.

### **PART III: CLOSURE AND POST-CLOSURE OF THE C&DLF – AREA 1 & MSWLF-PHASE III**

54. The permittee must conduct closure and post-closure activities in accordance with the approved plans (**DINXXX**) and Rule 15A NCAC 13B .1627. An updated closure and post-closure plan must be submitted for approval at least ninety (90) days prior to closure or partial closure of any landfill unit. The plan must include all steps and measures necessary to close and maintain the C&DLF – Area 1 on top of the closed MSWLF – Phase III in accordance with all rules in effect at that time. At a minimum, the plan must address the following:
- a. Design of a final cover system in accordance with Rule 15 NCAC 13B .1627 (c) or the solid waste management rules in effect at the time of closure;
  - b. Construction and maintenance/operation of the final cover system and erosion control structures; and
  - c. Surface water, ground water, and explosive gas monitoring.
55. The permittee must decommission the inactive landfill gas collection and control system (LFGCCs) from the C&DLF- Area 1 and the MSWLF - Phase III as shown on Sheet No. 6/ Drawing No. S5 according to the approved plan (**DIN XXX**).
- a. The existing ten (10) gas wells (GW-1 through GW-10) will be converted into pass gas vents and incorporated into the final cover system of the C&DLF - Area 1.
  - b. Other gas collection components including valves and piping will be cut, removed and/or capped and left in-place and incorporated into the final cover system of the C&DLF - Area 1.
  - c. The inactive blower/flare station will be dismantled and salvaged as scrap metal for recycle.
56. If the minimum 30-year post-closure period ends before the groundwater corrective action program is terminated, pursuant to Rule 15A NCAC 13B .1627 (d)(2)(B), the post-closure care period shall be extended at least until such time as the required corrective action program has been completed.

### **PART IV: OPERATION CONDITIONS FOR LCIDLF – FILL SEQUENCE 1**

57. Pursuant to the Rules 15A NCAC 13B .0201(g) and .0563(4), no later than **DATE XXX**, the permittee must submit a request to the Section for permit review and must submit updated facility and operational plans meeting the requirements of Rules 15A NCAC 13B .0565 and .0566.
58. This facility must conform to the operational requirements of the Rule, 15A NCAC 13B .0566, and to the approved plans (**DIN XXX**) required by Rule 15A NCAC 13B .0565(4).
59. This permit authorizes the LCIDLF containing the total gross capacity of approximately 321,529 CY within the permitted 9.8-acre waste footprint and defined as the volume measured from the bottom of waste through the top of final cover of the LCIDLF having a final fill elevation up to 238 feet amsl with a 4 (horizontal) to 1 (vertical) side slopes as shown on Sheet No. 8/ Drawing No. S7 and Sheet No. 16/ Drawing No. EX3. The estimated service life of the facility is through 2026, as stated in the approved Facility Plan (**DIN XXX**).

LCIDLF Unit	Acres	Gross Capacity (cubic yards)	Estimate Service Life
Fill Sequence 1 (Filled, as of June 17, 2014)	7.4	168,877	-
Fill Sequence 1 (remaining capacity upon completion of the vertical expansion)	--	116,909	8.5
Fill Sequence 2 (future development)	2.4	35,743	2.6
Total	9.8	321,529	11.1

Note:

1. The life expectancy of the LCIDLF is based on an assumed average disposal rate of 5,000 tons/year and is projected from June 17, 2014.
60. This facility is permitted to receive land clearing waste, yard trash, untreated and unpainted wood, uncontaminated soil, and inert debris such as unpainted rock, brick, concrete, and concrete block according to the approved plan (**DINXXX**) and Rule 15A NCAC 13B .0563(3). Waste acceptance requirements may be affected by future revisions and amendments to the NC General Statutes, or to the NC Solid Waste Management Rules.
61. Excavation, grading, and fill material side slopes must not exceed a ratio of three horizontal feet to one vertical foot (3:1) according to Rule 15A NCAC 13B .0565(3).
62. The permittee shall conduct monitoring of explosive gases quarterly at the property boundaries and within any facility structures and retain the monitoring log in the

operating record according to the approved plan (**DINXXX**) and Rule 15A NCAC 13B .0566(13).

- a. The concentration of explosive gases generated by the LCIDLF facility must not exceed twenty-five percent (25%) of the lower explosive limit for the gases in facility structures.
  - b. The lower explosive limit for the gases at the property boundary
63. Ground water quality at this facility is subject to the classification and remedial action provisions of 15 NCAC 2L.
64. Solid waste must be placed a minimum of four (4) feet above the seasonal high water table according to Rule 15A NCAC 13B .0564(8)(d).
65. Amendments or revisions to the North Carolina General Statutes or to the North Carolina Solid Waste Management Rules or any violation of ground water standards may necessitate modification of the approved design or operation plans, waste acceptance requirements or may require closure of the facility

#### COVER MATERIAL REQUIREMENTS

64. Pursuant to Rule 15A NCAC 13B .0566(4) and the approved plan (DIN XXX) ), the permittee must cover LCID waste with adequate thickness of suitable soil material. Soil cover must be placed over the working face at least once per month or when the active area reaches one (1) acre in size, whichever occurs first, or more often when necessary to prevent the site from becoming a nuisance, or to mitigate conditions associated with fire, windblown materials, vectors, or excessive water infiltration.
65. The facility must maintain a supply of cover material adequate to cover the working face in case of an emergency or fire, at all times. The earthen cover material must be effectively compacted to minimize soil erosion and repaired in a timely manner when the soil cover is eroded by surface water.
66. In the event that a leachate seep or break out is observed the permittee must take the following actions:
  - a. Take immediate measures to control, contain, and recover the discharged leachate according to the approved plan (**DIN XXX**).
  - b. Verbally notify the Section and the Regional Environmental Specialist of the occurrence as soon as practicable; and

- c. Within thirty (30) days following any such leachate release occurrence, a written document describing, in a minimum, the event of leachate release, approximate amount of leachate released, impacted extents, actions carried out to remove the discharged leachate, a strategy for preventing future occurrence.
- 67. Vegetative ground cover or other best management practices or measures sufficient to control erosion must be established according to Rules 15A NCAC 13B .0566 (6) & (7).
- 68. Upon completion of the final disposal operations, the permittee must close the disposal area with a minimum of one (1) foot of suitable soil cover which must be graded and sloped to allow surface water runoff in a controlled manner according to Rules 15A NCAC 13B .0566 (5).

## **PART V: MISCELLANEOUS SOLID WASTE MANAGEMENT UNIT SPECIFIC CONDITIONS**

### General Conditions

- 69. The Miscellaneous Solid Waste Management Units (MSWMUs), as described in the following Permit Conditions are permitted to receive wastes from the service areas defined in the Permit Condition **No. 4**, Attachment 3 of this permit. Received wastes and recyclables shall be stored, stockpiled, or disposed in the designated areas as shown on Sheet No. 2/Drawing No. S1 and Figure 1 in the approved plan (**DIN XXX**). The permittee must obtain Section approval before re-locating any of these operations or revising the operations.
- 70. The permittee must operate and manage the MSWMUs according to the following Permit Conditions, all applicable statutes and rules of the State of North Carolina and the approved Operations Manual (**DIN XXX**). Any revisions to the approved plan shall be approved by the Section, prior to implementation. However, a permit modification is not necessary for utilizing alternate markets that are generally or widely used for the legal disposition of recovered material or recyclables.
- 71. The permittee must conduct random waste screening processes according to the approved Operations Manual (**DIN XXX**) to ensure that prohibited or unacceptable wastes are identified and removed to designated areas (either at on-site or off-site facilities) for proper disposal at end of each working day.
- 72. The permittee must operate, maintain, and store received recyclables in reasonably sized areas or piles with adequate fire breaks and lanes, with sufficient dust and odor control

measures to minimize airborne emissions and to prevent dust or litter from becoming a nuisance or safety and fire hazard.

73. Surface water shall be diverted from all operational and storage areas to prevent standing water in operational areas and under or around storage piles. Water that comes in contact with solid waste is deemed to be leachate and shall be contained on-site or properly treated prior to discharge.
74. Effective vector control measures shall be applied as necessary to control flies, rodents, insects, and vermin.
75. The permittee must keep the latest contact information of the contract haulers and recyclers of the recyclable in the operating record.

#### OPERATIONAL CONDITIONS – CONVENIENCE CENTER

76. The Convenience Center is located on the northwest side of the C&DLF and on the northeast side of Transfer Station (Permit No. 4307T-TRANSFER-1997) and permitted to receive/collect small loads of municipal solid wastes (MSW) and recyclable wastes including:
  - a. Comingled recyclables - newspaper, papers, cardboard boxes, glass & glass containers, aluminum or steel containers, recyclable plastic bottles, and etc., which are placed in the same roll-off containers.
  - b. Non-comingled recyclables - used/scrap tire, used vehicle oil filter, batteries, pallets, tear-off asphalt shingle, and consumer electronics, which are placed in the designated areas or containers.
77. The permittee shall operate and management tear-off asphalt shingle area by implementing the Asphalt Shingle Recycling of the approved Operations Manual (**DIN XXX**). Tear-off asphalt shingle for recycling shall be accepted only when the shingle is appropriately source-separated prior to delivery to the facility. Neither sorting, mixing, processing asphalt shingle nor separating wastes from asphalt shingle are allowed at this facility.
78. The permittee must operate and manage the scrap tire collection areas in accordance with the requirements of 15A NCAC 13B, Rule .1107.
79. A visible label, marking, or sign for collected waste must be posted on the exterior surface of container or placed on a post next to the container or area.

80. Proper aisle spaces between waste containers, i.e., drums or roll-off boxes, must be maintained at all times for inspection of leakage, for firefighting, and for container removal.
81. After being weighed on the scale, the received MSW and bulk wastes must be transported to the on-site Transfer Station (Permit No. 4307T-TRANSFER-1997) and subsequently disposed of at the permitted disposal facility; the recyclables must be transported to the recycling facilities when the containers are about to fill up.

#### OPERANTIOAL CONDITIONS – YARD WASTE STORAGE AND PROCESSING AREA

82. The unit that is located in an approximate one-acre area at the north end of the LCIDLF which is an inactive portion of the landfill, is a treatment and processing facility as defined in Rule 15A NCAC 13B .0101(49), and permitted to receive, process, and store land clearing debris and waste, yard waste, or wooden pallets as defined in Rules 15A NCAC 13B .0101(23) and .0101(56), and NCGS 130A-290(44a), respectively.
83. The received waste or processed/ground material (such as mulch) must be stored or stockpiled in the following manner:
  - a. Each windrow has the maximum height of 15 feet and the width of 50 feet in size at any time.
  - b. Each windrow shall be maintained at least 25-foot clear distance or perimeter from drainage ditches and swales, around the processing area, and other stockpiles of raw wastes and ground material to allow for inspection, monitoring temperature, or firefighting.
  - c. Each windrow shall be maintained at least 75-foot clear distance from property boundaries.
84. The permittee is only permitted to use the processed or ground wastes as on-site surface stabilization for erosion control or to use as boiler fuel taken to an off-site facility.

#### OPERATIONAL CONDITIONS – C&D MATERIAL RECOVERY AREA

85. The permittee is permitted to conduct C&D material recovery for reuse or recycling from the working face of the C&DLF – Area 1.
86. The permittee must temporarily store the recover material at the designated locations and manage and handle the recover material in accordance the approved plan (**DIN XXX**), the following permit conditions, and in compliance the requirements stated in NCGS 130A-309.05(c).



87. The following wastes are considered as recover material as defined in NCGS 130A-290(a)(24) and permitted to be recovered from the working face of the C&DLF –Area 1:
- a. Non-treated and non-painted clean wood including wooden pallet.
  - b. Cardboard and scrap metal and
  - c. Uncontaminated, unpainted, or non-asphaltic concrete, brick, and concrete block.
88. The permittee is prohibited to conduct the material recovery from MSW wastes at the landfill facility including the transfer station.

**OPERATIONAL CONDITIONS – WHITE GOODS AND SCRAP METAL HANDLING AREA**

89. The permittee is permitted to receive and temporary store white goods as defined in NCGS Article 9, Chapter 130A-290(a)(44) and scrap metals at the designated area adjacent to the maintenance building as shown on Figure 1 of the approved Operations Manual (**DIN XXX**). The permittee must manage the white goods in accordance with all applicable statutes and rules of the State of North Carolina.
90. The permittee must separately store the white goods containing Freon from the non-Freon white goods and scrap metal at this area and must ensure that chlorofluorocarbon refrigerants (Freon) inside the white goods are properly removed by well-trained personnel prior to transporting off-site to a recycling facility.

**PART VI: POST CLOSURE CONDITIONS FOR THE UNLINED MSWLF UNITS – PHASES I, II, & III**

91. The unlined MSWLF units – Phases I, II & III (below the active C&DLF) were closed with the soil covers before and in 1998. Post-closure maintenance and monitoring of the landfill unit must be conducted in accordance with approved post-closure plans (**DIN XXX**) and the North Carolina Solid Waste Management Rules.
92. The permittee must maintain the integrity and effectiveness of the cap system, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, leachate outbreaks, or other events; preventing surface water from impounding over waste; and preventing run-on and run-off from eroding or otherwise damaging the cap system. As issues are resolved, notations should be documented and placed in the operating records.
93. The permittee must conduct routine inspections at the closed MSWLF units and the C&DLF units and implement the measures to prevent leachate break outs. In the event of any leachate break out is observed, the permittee must notify the Section and implement

the corrective actions including environmental media sampling described in the approved plans (**DIN XXXX**).

94. The permittee must conduct routine inspection and maintenance of the on-site leachate collection and management system components including sumps, pumps, pump station and storage tanks according to the approved Operations Manual (**DIN XXXX**).
95. Pursuant to Rule 15A NCAC 13B .1629(c)(3), post-closure use of the property is subject to review and approval by the Section and must not disturb the integrity of the cap system, or the function of the monitoring systems. The Section may approve any other disturbance if the permittee demonstrates that disturbance of the cap system, including any removal of waste, will not increase the potential threat to human health or the environment.
96. Any proposed lateral expansion to the closed C&DLF unit and/or the unlined MSWLF unit would be considered a new landfill for purposes of Solid Waste Management permitting in accordance with NCGS 130A-294 & -295.8.

**POST-CLOSURE LAND USE CONDITIONS FOR OPERATING THE HARNETT COUNTY SHERIFF DEPARTMENT TRAINING FACILITY**

97. This permit to authorize the permittee to operate the Harnett County Sheriff Department Training Facility at the location on top of the closed MSWLF – Phase I as shown on Sheet No. 2/ Drawing No. S1 according to the approved Operations Manual (**DINXXX**). The training facility is not permitted to be used by the general public and shall conform to the specific conditions set forth in this permit and the provisions of Rule 15A NCAC 13B .1604(b)(2).
98. The permittee must comply with the approved plan (**DIN XXX**) and any applicable regulation, rule, or law, which are issued by federal, state, or local government agency and related to operations and safety procedures specific to firearms or other training activities. This permit does not grant permission to violate any regulatory standard, rule, law or permit condition. The authorization may be revoked should the project fail to be protective of human health and safety or the environment.
99. Pursuant to Rule 15A NCAC 13B .1629(c)(3), the permittee must operate the training facility without impairing or damaging the integrity of the final cover system of the landfill, any other components of the containment system, or the function of the monitoring system by achieving following requirements:
  - a. Minimizing or eliminating an impact to the existing soil cover of the landfills by conducting a routine inspection, maintenance, and/or restoration at the soil cover

system, installing the best management practices (BMPs) to prevent soil erosion, and mowing and maintaining healthy vegetative ground cover.

- b. Backfilling and re-grading for drain of any low lying area/subsidence of the soil cover system to prevent surface water (run-on or precipitation) from ponding or accumulating on the soil cover.
100. Coordinating the training schedule without interrupting the schedules for the rule-required sampling of environmental media or the maintenance of the monitoring devices.
101. The permittee must minimize or eliminate the potential lead impact in the soil by implementing the following requirements and the approved operation plan (DIN XXX):
- a. Properly maintain and repair the installed BMPs – earthen berm structures and/or traps at the fire range and runoff management BMPs.
  - b. Maintain the records or documents of the range use including type and number of rounds fired at the Sheriff Department.
  - c. Regularly collect and remove the spent shells and other trash from the facility on the conclusion of each training session.
102. The permittee must mitigate the potential hazards including fire due to existence of landfill gas at the facility including a fire range, structures, and classrooms by conducting routine landfill gas monitoring inside the structure according to the approved plan (DIN XXX). No smoking and any open flame are allowed within the premise of the landfill facility.
103. The permittee must install or post and properly maintain the warning signs and security measures – fencing and access restriction/control devices.
104. The permittee must maintain the records of inspection, monitoring, and maintenance of the training facility to the operating record at the landfill facility.

- End of Permit Conditions -